

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

July 31, 2000

Human Performance

Human Performance Group Chairman's Factual Report

ADDENDUM #2

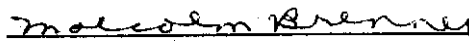
A. ACCIDENT

Operator: EgyptAir (Flight 990)
Location: Near Nantucket, MA
Date: October 31, 1999
Time: 0150 eastern standard time²
Aircraft: Boeing 767-366ER, SU-GAP
NTSB Number: DCA-00-MA-006

C. ADDENDA

Enclosed are responses to the questionnaire for families of the flight 990 flight crew contained in Item 5.6 of the Human Performance Factual Report provided to the NTSB by the Chief of the Egyptian Investigation Committee.³

Submitted By:


Bartholomew Elias, Ph.D.
Human Performance Investigator

Date July 31 00


7-31-00

² All times are eastern standard time based on a 24-hour clock, unless otherwise noted.

³ Received on July 31, 2000.

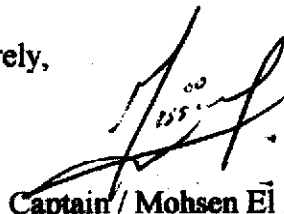
July 31, 2000

Mr. Gregory Phillips
National Transportation Safety Board
490 L'Enfant Plaza, S.W.
Washington, DC 20594

Dear Mr. Phillips

Please find attached herewith, the response of the questionnaire required by the
Human Performance Group.

Sincerely,

A handwritten signature in black ink, appearing to read "Mohsen El Missiry", with a stylized flourish at the end.

Captain / Mohsen El Missiry
Chief of Egyptian Investigation Committee



National Transportation Safety Board

Washington, D.C. 20594

Office of Aviation Safety

CAPT. HATEM ROUSHDI

It is routine for the National Transportation Safety Board, in the course of its investigation of an airplane accident, to obtain information about the general health, behavior, and lifestyle of pilots. The best source for this information is members of the pilots' immediate families. Even information that seems routine can be very helpful to the investigation. If you choose to respond, please provide written answers to the questions that follow on a separate sheet of paper. We greatly appreciate your cooperation.

Please describe what you know about the following:

1. The pilot's activities before he left on his trip and his activities in the United States before the accident;

*NORMAL ACTIVITIES OF WORK WITHIN
FLIGHT OPERATIONS AS CHIEF PILOT FOR BOEING 767
AND ITS RELATED ACTIVITIES*

NORMAL DOMESTIC ACTIVITIES

2. The pilot's general activities during past visits to the United States, including information about any relatives or friends in the United States we could contact to assist us in the investigation;

*HE WAS ALWAYS MONITORING HIS SONS
IN THE USA WEST COAST WHO WERE LEARNING
TO FLY AND STUDYING TO GET THEIR LICENCE
HIS BROTHER AND SISTER LIVE IN THE USA*

3. The pilot's health and physical fitness, including the pilot's visits to doctors and use of medication in the past year, and any changes in the pilot's health over the past year;

NORMAL FITNESS

NO REPORTED VISITS TO DOCTORS

4. The pilot's family and personal life, including any significant events in the pilot's family or personal life over the past year, and the pilot's plans for the future;

VERY DEVOTED TO HIS FAMILY AND HIS

SON'S EDUCATION AND FUTURE

5. The pilot's financial situation, including any significant changes in the pilot's financial situation over the past year; and

COMFORTABLE WITH NO SIGNIFICANT
CHANGES

6. The relationships between the pilot and the other crewmembers on board the airplane and the pilot's relationship with the company.

HE WAS ALWAYS VERY FRIENDLY AND
IN CLOSE RELATION WITH THE COMPANIES MANAGEMENT

Finally, please provide us with any additional information about the pilot that may be helpful to our investigation.

NONE



National Transportation Safety Board

Washington, D.C. 20594

Office of Aviation Safety

F/O ADEL ANWAR

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Please describe what you know about the following:

1. The pilot's activities before he left on his trip and his activities in the United States before the accident;

*NORMAL ACTIVITIES AS A PILOT IN EGYPT AIR
MAKING ARRANGEMENTS FOR HIS UPCOMING WEDDING*

2. The pilot's general activities during past visits to the United States, including information about any relatives or friends in the United States we could contact to assist us in the investigation;

*NO KNOWLEDGE OF ANY SPECIAL
ACTIVITIES*

3. The pilot's health and physical fitness, including the pilot's visits to doctors and use of medication in the past year, and any changes in the pilot's health over the past year;

NORMAL . WITH NO REPORT OF COMPLAINTS

4. The pilot's family and personal life, including any significant events in the pilot's family or personal life over the past year, and the pilot's plans for the future;

ENGAGED AND PREPARING FOR HIS
WEDDING UPON HIS RETURN FROM HIS FLIGHT

5. The pilot's financial situation, including any significant changes in the pilot's financial situation over the past year; and

COMFORTABLE
TAKING CARE OF BILLS FOR UPCOMING
MARRIAGE

6. The relationships between the pilot and the other crewmembers on board the airplane and the pilot's relationship with the company.

NORMAL - FRIENDLY

Finally, please provide us with any additional information about the pilot that may be helpful to our investigation.

NONE



National Transportation Safety Board

Washington, D.C. 20594

Office of Aviation Safety

CAPT. AHMED HABASHI

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Please describe what you know about the following:

1. The pilot's activities before he left on his trip and his activities in the United States before the accident;

*NORMAL ROUTINE ACTIVITIES DOMESTIC OR
SOCIAL WITH NOTHING TO REPORT*

2. The pilot's general activities during past visits to the United States, including information about any relatives or friends in the United States we could contact to assist us in the investigation;

*NOTHING TO REPORT
HIS SISTER RESIDES IN THE USA*

3. The pilot's health and physical fitness, including the pilot's visits to doctors and use of medication in the past year, and any changes in the pilot's health over the past year;

HE HAS HAD BACK PROBLEMS FOR A
LONG TIME BUT WAS TAKING CARE OF IT
NO NEW DEVELOPEMENT OR CHANGES

4. The pilot's family and personal life, including any significant events in the pilot's family or personal life over the past year, and the pilot's plans for the future;

DEVOTED TO HIS FAMILY AND CHILDREN
A VERY CARING FATHER.

NO SIGNIFICANT EVENTS

5. The pilot's financial situation, including any significant changes in the pilot's financial situation over the past year; and

COMFORTABLE
NO KNOWLEDGE OF ANY SIGNIFICANT CHANGES

6. The relationships between the pilot and the other crewmembers on board the airplane and the pilot's relationship with the company.

VERY FRIENDLY
NORMAL RELATION WITH THE COMPANY

Finally, please provide us with any additional information about the pilot that may be helpful to our investigation.

NONE



National Transportation Safety Board

Washington, D.C. 20594

Office of Aviation Safety

F/O GAMIL EL BATTOUTY

PLEASE REFER TO ATTACHED REPORT

It is routine for the National Transportation Safety Board, in the course of its investigation of an airplane accident, to obtain information about the general health, behavior, and lifestyle of pilots. The best source for this information is members of the pilots' immediate families. Even information that seems routine can be very helpful to the investigation. If you choose to respond, please provide written answers to the questions that follow on a separate sheet of paper. We greatly appreciate your cooperation.

Please describe what you know about the following:

1. The pilot's activities before he left on his trip and his activities in the United States before the accident;
2. The pilot's general activities during past visits to the United States, including information about any relatives or friends in the United States we could contact to assist us in the investigation;

3. The pilot's health and physical fitness, including the pilot's visits to doctors and use of medication in the past year, and any changes in the pilot's health over the past year;

4. The pilot's family and personal life, including any significant events in the pilot's family or personal life over the past year, and the pilot's plans for the future;

5. The pilot's financial situation, including any significant changes in the pilot's financial situation over the past year; and

6. The relationships between the pilot and the other crewmembers on board the airplane and the pilot's relationship with the company.

Finally, please provide us with any additional information about the pilot that may be helpful to our investigation.

**Psychiatric Report Re: Captain Gamil El Batoty
EgyptAir Accident Flight 990**

1. Capt. Battoty had not been referred to the psychiatric department of the Civil Aviation medical Board since it was instituted in 1972. His last general medical check up was on 28 July 1999.

Pilots are referred to the Psychiatric Department for the following conditions:

- a. At the start of training as students of aviation and on obtaining Private, Commercial, and Airline pilot licenses.
 - b. Reference from the medical sections on observation of any psychiatric symptoms.
 - c. On missing several periodic medical examinations with the Medical Board.
 - d. After accidents of any type.
 - e. Presence of positive urine testing for substances abuse during periodic medical examinations.
 - f. If referred by any other source such as the person himself, family doctors or his company management.
2. Capt. Battoty's previous work records were good and there were no complaints regarding him while he was in either the Air Force or at EgyptAir.
 3. In the Air Force he worked as an instructor in the Aviation Academy. He did not join actual combat in the war. After the 1973 war, he returned to EgyptAir and continued employment.
 4. I interviewed the family after the accident. Capt. Battoty was married and had 5 children and 3 grand children. His 3 sons are university students and two of them are about to be graduated. One is already working. The family appears to be stable and greatly respecting the deceased father. Capt. Battoty was almost a father figure for many of his relatives and extended family.

There is no family history of mental illness and Capt. Battoty had no previous psychiatric treatment. He was making preparations for the marriage of his son in two months time.

His small daughter had an illness (L.E.) and he took her several times to a doctor David in California. During the last visit the doctor reassured Battoty that his daughter had improved to a large extent with treatment she was receiving. On Battoty's last journey he was carrying his daughters medical records that he had shown to the doctor in California. The family lost the entire medical record file as the result of the accident and his wife sent for the doctor to obtain duplicate copies.

Capt. Battoty's son Karim told me on the telephone that Capt. Battoty was bringing home a few things for the family. Among them, two tires for their car in Cairo.

His wife Omayma told me that Battoty did not ask to leave the company, as he was already retiring in February. She said that he had many financial projects in his mind. He was due to take a good amount of money on his retirement from EgyptAir, almost 400,000 Egyptian pounds.

5. I interviewed his friends in EgyptAir, especially his close friend Capt. Badawy. There was a consensus of opinion that Battoty was always cheerful and that he loved life. He always accepted any pressures with satisfaction. He did not smoke or drink. While in New York on the day before the accident, Battoty gave Capt. Badawy a few tablets of Viagra. When Capt. Badawy asked for more tablets, he refused and said "I keep the whole bottle for many friends in Cairo."
6. I reviewed the interview summaries done by the NTSB witness group, which was led by Bart Elias and others on 1 Nov 1999. According to the interview summaries, Capt. Battoty appeared to be friendly and helpful to others. Just before the accident there were no unusual events and everything appeared normal.
7. I listened to the CVR on 30 November. I can divide the recording into several parts:
 - a. *Entrance of Capt. Battoty into the cockpit -*
There was a discussion about who would take over the first officer duties for the first part of the flight. This ended by Capt. Battoty saying, "I am going to eat outside then come back." However, copilot Adel asked Capt. Battoty to take over, and the latter accepted and then asked for dinner.
 - b. *A period of discussion between the pilots -*
The discussion was mainly about criticism of other pilots and policies inside the company. This went on for some time and Capt. Battoty participated in the conversation. However, he does not sound angry, rather he was calming and soothing to the others. He told Capt. Habashi not to worry, that "everything will be alright."
 - c. *Just before the accident -*
It was evident that Capt. Battoty had just finished eating and enjoying his dinner. The hostess asked him "Do you want any more food?" He replied using the Arabic expression "Keda foll awy" (No thank you, it was marvelous.)

d. *First stage of trouble –*

There is not much talking in this segment, other than Capt. Battoty asking repeatedly in an apprehensive way for the support of God.

e. *Final stages of trouble –*

Here there are many anxious voices. The way the voices address Capt. Battoty and the way he answers them, shows that Battoty was responding and cooperating with them.

Comment: The CVR recording gives us a unique chance to listen and examine the affective state of the crewmembers just before and during the accident. What is important is not only the content of Capt. Battoty's speech, but also the manner and the tone of speech. A sudden change occurred from the confidence, calmness and enjoyment to that of hesitation, apprehension and perplexity. There is no internal illness that can cause such a sudden change, rather this is consistent with conforming with an overwhelming and fatal situation.

8. Final conclusions

There is no evidence that Capt. Battoty was suffering from schizophrenia, alcohol intoxication, severe depression or any psychotic state.

In any case of suspected suicide, the specialist of human behavior searches mainly for evidence of psychological depression. If he cannot find this evidence, the possibility of suicide is remote. But further to this, if he also finds evidence of enjoyment and good mood, the possibility of suicide becomes very remote and insignificant.

Dr. M. Adel Fouad, M.R.C. Psych. Lond.
Consultant Psychiatrist